



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/312,302 | 05/14/1999 | MARIO D. NEMIROVSKY | P3803 | 2422 |

24739 7590 10/02/2002

CENTRAL COAST PATENT AGENCY
PO BOX 187
AROMAS, CA 95004

EXAMINER

DONAGHUE, LARRY D

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2154

DATE MAILED: 10/02/2002

3

Please find below and/or attached an Office communication concerning this application or proceeding.

1X

Office Action Summary

Application No.

09/312302

Applicant(s)

Examiner

Group Art Unit

2154

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-42 is/are pending in the application.
- ☐ Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-42 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____.
 - ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of References Cited, PTO-892
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

Art Unit: 2154

1. Claims 1-42 are presented for examination.
2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 7, 21, and 35 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant has merely supplied a suggestion to do, a suggestion to do does raise the specification to the level of enablement.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 5-6, 8-12, 15-17, 19-20, 22-26, 29-31, 33-34, and 36-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Nemirovsky (DISC, A Dynamic Stream Computer).

Nemirovsky taught the invention as claimed including a processor executing a plurality of streams (page 63), a set of functional resources page (101 and 102) , interrupt logic (page 96) and interrupts are mapped to one or more specific streams (page 63).

Art Unit: 2154

As to claim 2 and 3, Nemirovsky taught one exception or interrupt mapped to two or more streams (page 63) and two or more interrupts or exception is mapped to one stream (page 63).

As to claim 5, Nemirovsky taught that the mapping is programmable (pages 94-98).

As to claim 6, Nemirovsky taught the interrupt logic refers to a data store (page 96, fig. 5.13).

As to claim 8 and 9, Nemirovsky taught the interrupts are from an external device and software interrupts (page 95).

As to claim 10, Nemirovsky taught a mask (page 96).

As to claims 11-12 , Nemirovsky taught after interrupting the streams and vectoring to a service routine (pages 96-97).

Claims 15-17, 19-20, 22-26, 29-31, 33-34, and 36-40 fail to teach or define above or beyond claims 1-3, 5-6, 8-12, and are rejected for the reasons set forth above.

6. Claims 4, 13-14, 18, 27-28, 32 and 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nemirovsky as applied to claims 1-3, 5-6, 8-12, 15-17, 19-20, 22-26, 29-31, 33-34, and 36-40 above, and further in view of Nemirovsky et al. (DISC, A Dynamic Stream Computer).

Nemirovsky et al. (DISC, A Dynamic Stream Computer) reference was cited by applicant on paper no.2.

Art Unit: 2154

As to claims 13, 27 and 41, Nemirovsky did not expressly teach delaying the vectoring to a service routine, Nemirovsky et al. taught that this technique is useful in synchronization (page 167, section titled Interrupts). It would have been obvious to one of ordinary skill in the art to combine these references as they are directed to the same device.

As to claims 14, 28, and 42, Nemirovsky taught that different streams vector to different service routines (page 96, first paragraph).

As to claims 4, 18 and 32, Nemirovsky (page 64) mapping is static at processor design, by suggesting it would be beneficial to have a dedicated IS for interrupts.

7. A shortened statutory period for response to this action is set to expired THREE (3) months, ZERO days from the date of this letter. Failure to respond within the period for response will cause the application to be abandoned. 35 U.S.C 133.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to L. Donaghue whose telephone number is (703) 305-9675. The examiner can normally be reached on M-F from 8:00 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An, can be reached on (703) 305-9678. The fax phone number for an official fax is (703) 746-7238, an after-final fax is 703-746-7238 and a draft or non-official fax is 703-746-7240.

Art Unit: 2154

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

MURRY D. DONAGHUE
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to be 'M. Donaghue', written in a cursive style with a large loop at the end.

Attachment for PTO-948 (Rev. 03/01, or earlier)
6/18/01

The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.